## 2SA2077

### Silicon PNP epitaxial planar type

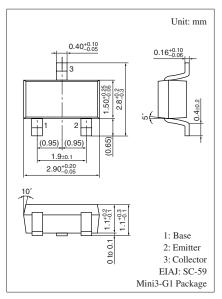
For general amplification Complementary to 2SC5845

#### ■ Features

- High forward current transfer ratio h<sub>FE</sub>
- Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing.

### ■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit	
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	-45	V	
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	-45	V	
Emitter-base voltage (Collector open)	$V_{EBO}$	-7	V	
Collector current	$I_C$	-100	mA	
Peak collector current	$I_{CP}$	-200	mA	
Collector power dissipation	P <sub>C</sub>	200	mW	
Junction temperature	$T_{j}$	150	°C	
Storage temperature	$T_{stg}$	-55 to +150	°C	

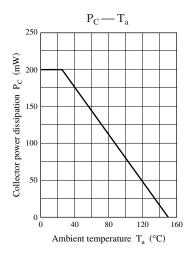


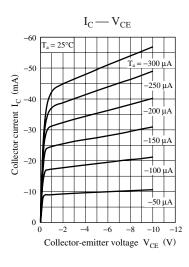
Marking Symbol: 7L

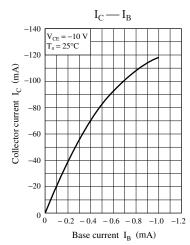
### ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

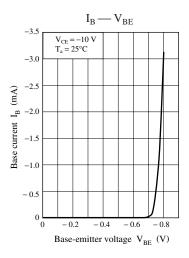
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	$I_C = -10 \ \mu A, I_E = 0$	-45			V
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	$I_C = -2 \text{ mA}, I_B = 0$	-45			V
Emitter-base voltage (Collector open)	$V_{EBO}$	$I_E = -10 \mu A, I_C = 0$	-7			V
Collector-base cutoff current (Emitter open)	$I_{CBO}$	$V_{CB} = -20 \text{ V}, I_E = 0$			- 0.1	μΑ
Collector-emitter cutoff current (Base open)	$I_{CEO}$	$V_{CE} = -10 \text{ V}, I_B = 0$			-100	μΑ
Forward current transfer ratio	$h_{FE}$	$V_{CE} = -10 \text{ V}, I_{C} = -2 \text{ mA}$	160		460	_
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	$I_C = -100 \text{ mA}, I_B = -10 \text{ mA}$		- 0.2	- 0.5	V
Transition frequency	$f_T$	$V_{CB} = -10 \text{ V}, I_E = 1 \text{ mA}, f = 200 \text{ MHz}$		80		MHz
Collector output capacitance (Common base, input open circuited)	C <sub>ob</sub>	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		2.2		pF

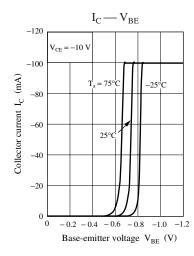
Note) Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

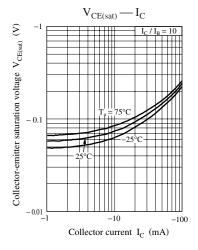


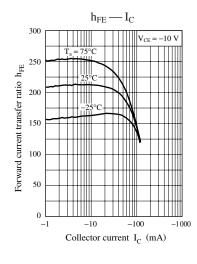


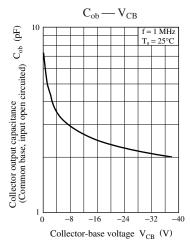












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